



Renforcement des capacités dans le domaine de l'hydrographie – Formation Cat-B du CIDCO

Colloque CIDCO 2023

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Rimouski, 3 Avril 2023

CIDCO



VISION :

Être un centre d'expertise de renommée mondiale et un partenaire de choix en hydrographie pour une économie bleue durable.

MISSION :

Moderniser l'hydrographie par la recherche appliquée, le développement, le transfert technologique et la formation.

Training objectives

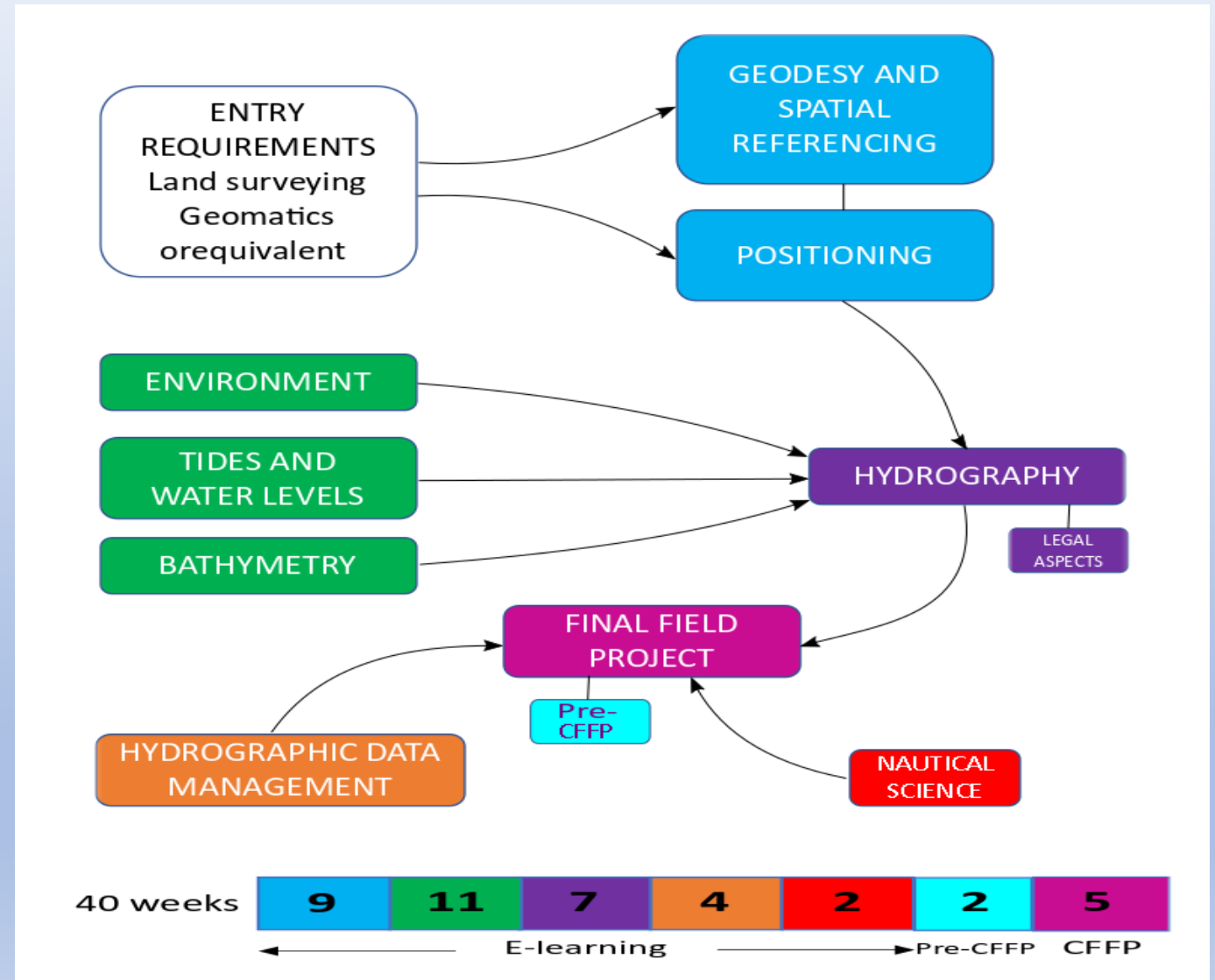
- Technology transfer from research to the private sector and training on new technologies in hydrography and ocean mapping.
- Provide specialized training in the collection and processing of hydrographic data to students from all over the world.
- Train qualified hydrographers and polyvalent technicians.
- Offering a recognized course in Canada, delivered in French and in English.

Course information

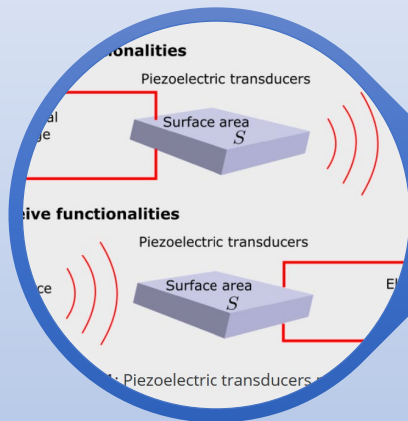
Name of the Program	CIDCO Course in hydrographic surveying
Institution	CIDCO
Recognition year	2014/2022
Level of recognition	Category "B"
Duration of the Program	40 weeks
Duration of the final field project (CFFP) and Practicals (Pre-CFFP)	7 weeks
Country of the institution	Canada
Language(s) in which the Program is delivered	<u>French and English</u>
Program capacity	15 students maximum

Course Structure

- **E-learning**
9 Modules that cover all the theory and hydrographic concepts.
- **Practical training**
Hands-on exercises to put into practice the learned theory
- **Final Field Project (CFFP)**
Carry out the various hydrographic surveying task



Learning outcomes



- Knowledge of operational principles of hydrographic systems components;



- Ability to set up a hydrographic system on a survey vessel;



- Ability to conduct hydrographic surveys in accordance with the IHO hydrographic standards

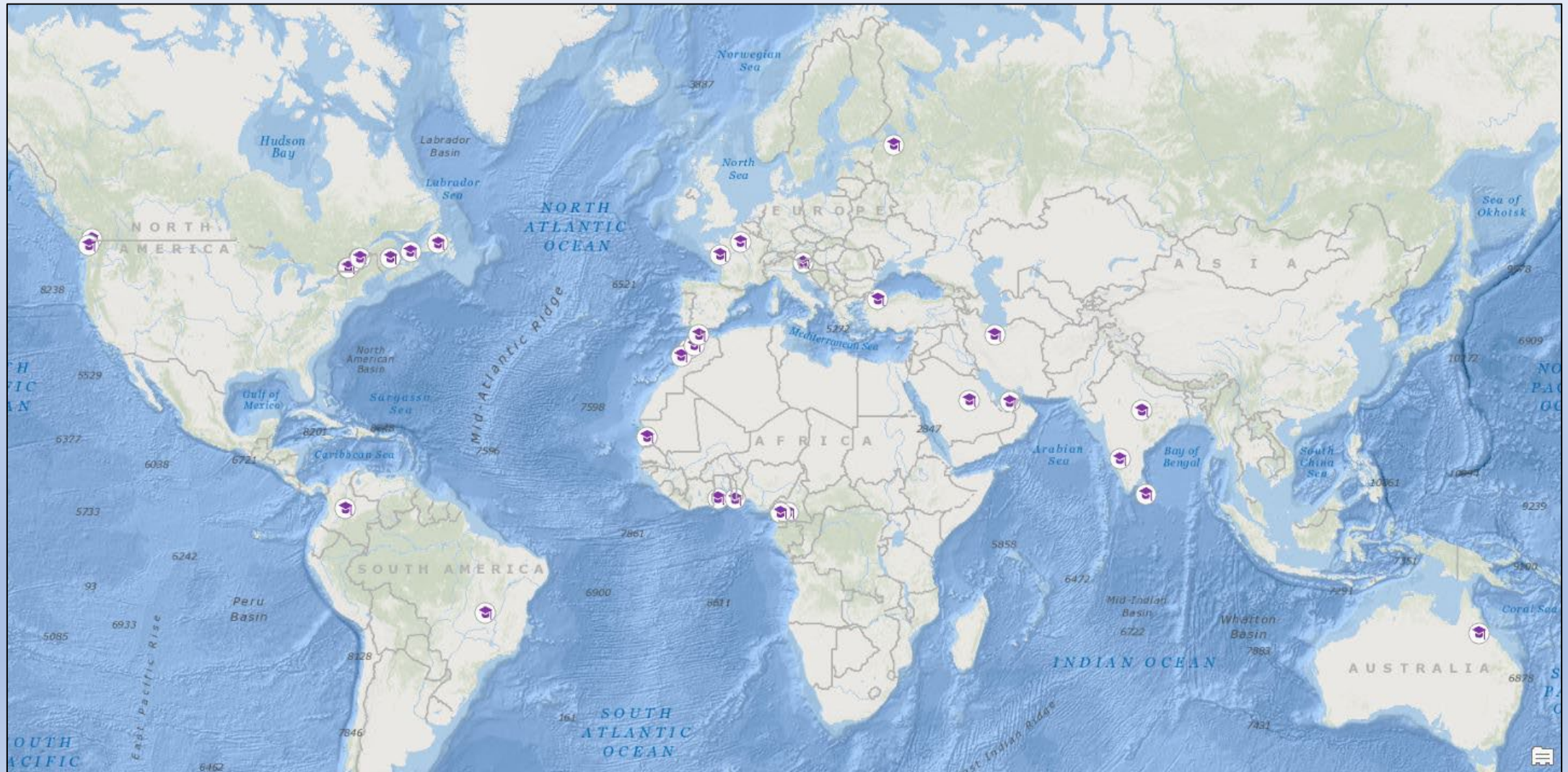


- Being able to perform quality control and quality assessment of hydrographic data;



- Perform data processing and produce marine charts using dedicated software;

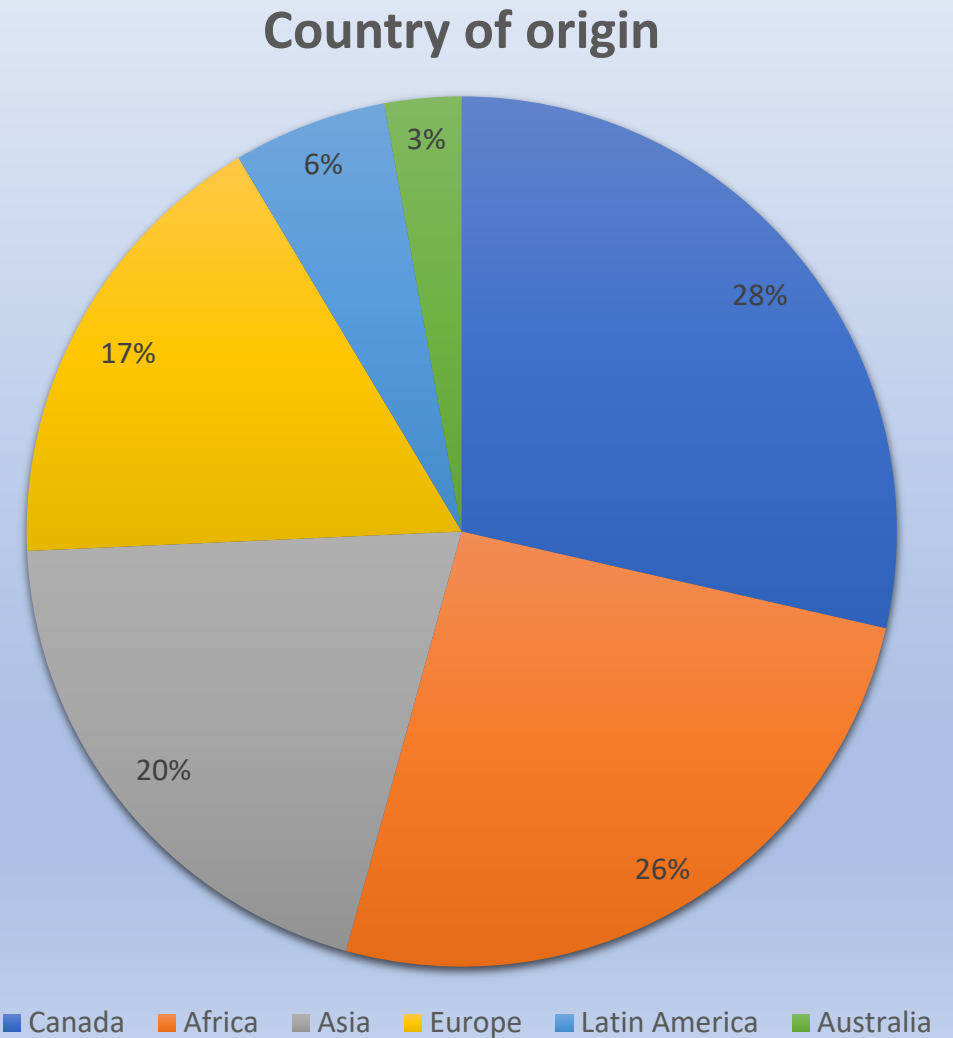
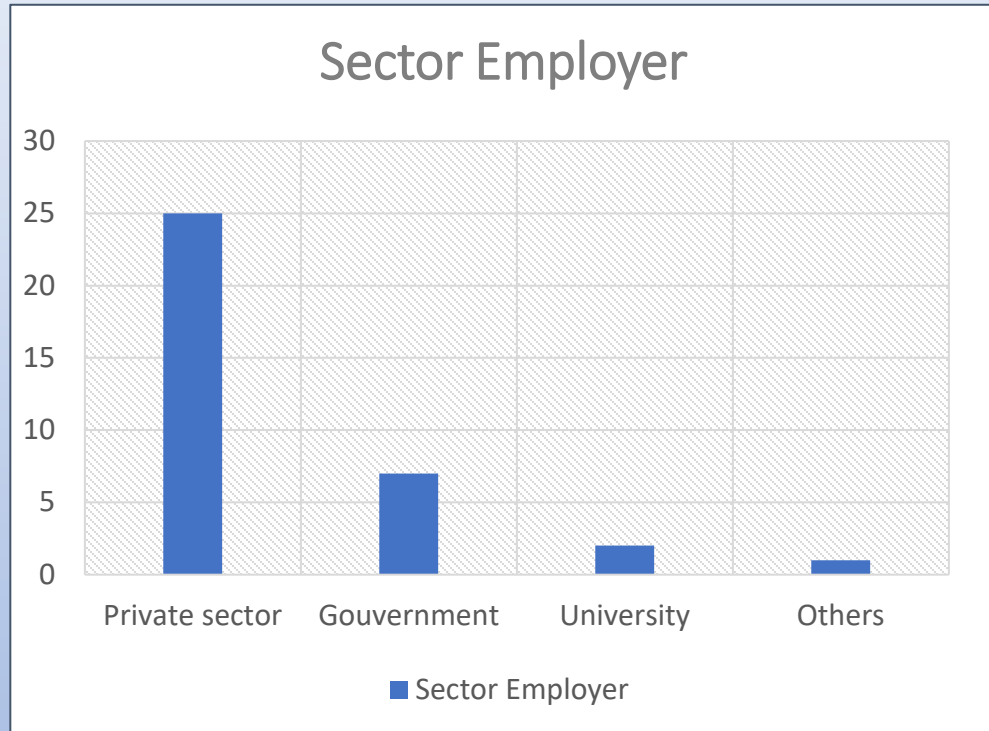
Students Country of Origin



Students profiles



Capacity building



Blended learning



Quiz navigation

1 2 3

Finish attempt ...

Question 1
Not complete
Marked out of 1.00
Flag question

In the following geo-referencing equation:

$$\mathbf{X}_n = \mathbf{P}_n + \mathbf{C}_{IS}^n \begin{pmatrix} 0 \\ 0 \\ \rho \end{pmatrix}$$

What is the term that does not depend on time?

Select one:

- a. The SBES range ρ
- b. The IMU to navigation frame transformation matrix \mathbf{C}_{IS}^n
- c. The position \mathbf{P}_n
- d. The boresight angle frame transformation matrix \mathbf{C}_{IS}^n

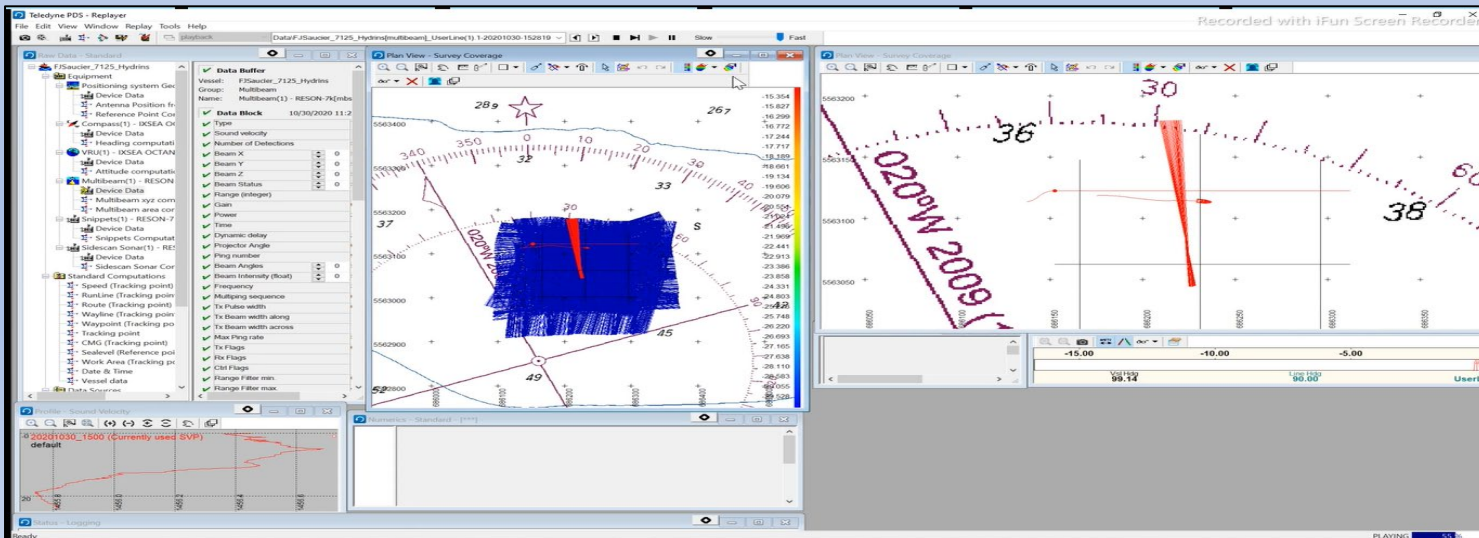
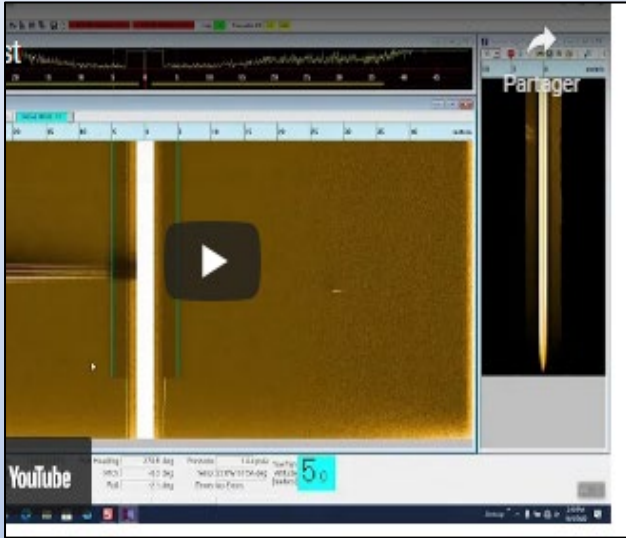
Check

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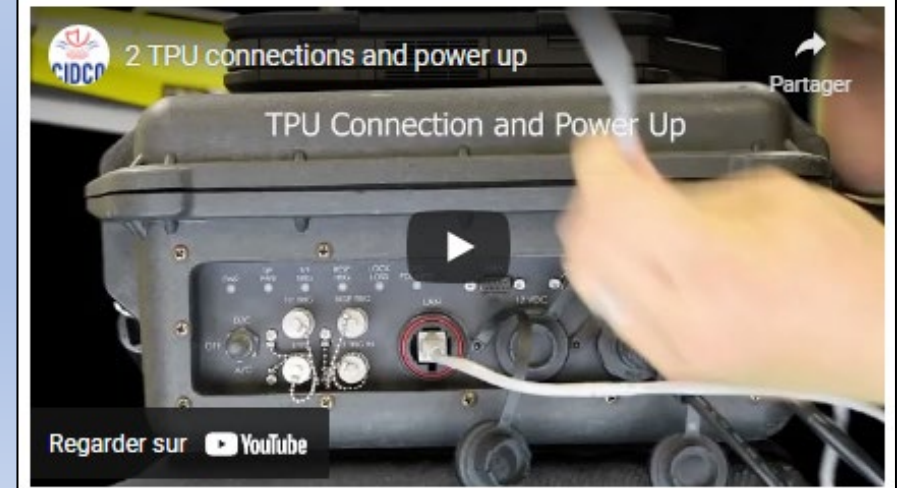
E-learning platform



Simulations Exercises



...ow fish and Top side Unit (watch the video N°2 : TPU connections and power-up);



Final Field Project

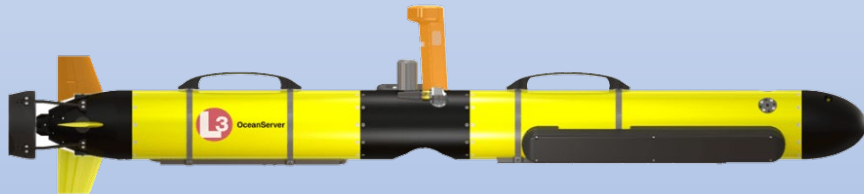


CFFP 2022 Class

Equipment



Sonar à balayage latéral multifaisceaux Klein MA-X View 600



Véhicule autonome sous-marin Iver 3



Récepteur GPS



Équipement arpentage



Hydroball©

Sonar multifaisceaux Kongsberg EM 2040P



Sonar multifaisceaux R2Sonic 2020



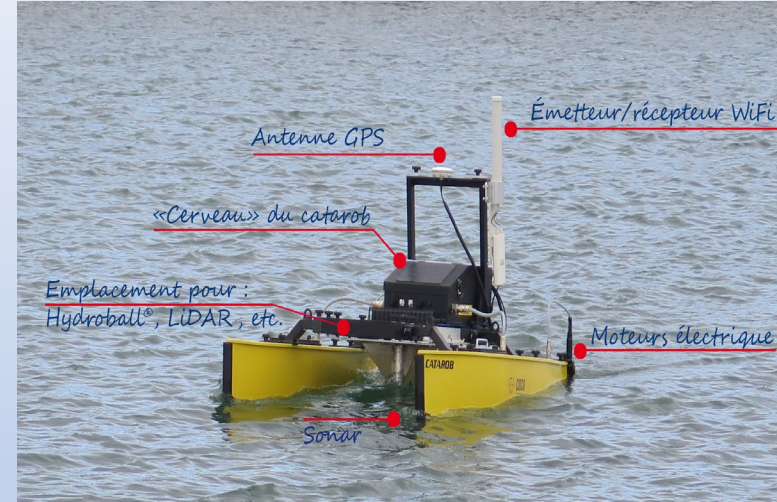
IMU iXblue Hydrins



Sondes multiples



Vessels



Thank you! / Merci!

